Centralized NASA Property Systems Operational Support Hand Book

Version 1

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National Aeronautics and Space Administration

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Preface

This document is under configuration control of the Marshall Space Flight Center (MSFC) Consolidation Center (CC) SESAAS Configuration Management Plan. Once baselined, changes to this document will be made by approved NASA Change Control Requests (1620 Form). Questions concerning this document should be addressed to:

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1 INTRODUCTION

This Operational Support Hand Book (HB) has been established to ensure appropriate operational support areas are defined and addressed for the National Aeronautics and Space Administration (NASA) Centralized Property Systems, which include the NASA Equipment Management System (NEMS), the NASA Property Disposal Management System (NPDMS), and the NASA Supply Management System (NSMS)/ NASA Online Supply Catalog (NOSC), hereafter referred to as "Centralized Property Systems."

1.1 PURPOSE

This HB augments the User and Operations Guides (UOG) and provides additional information on available user tools and utilities. It defines the support objectives of the NASA Automated Data Processing (ADP) Consolidation Center (NACC) and the Sustaining Engineering Support for Agencywide Administrative Systems (SESAAS) Support Teams, and the cooperative efforts between the participating Centers and the NACC/SESAAS Support Teams. It also defines the problem management process required to provide acceptable levels of support to the end-users.

1.2 SCOPE

This HB provides information to the Center Technical Support Personnel (CTSP) on the processes and tools needed to use the Centralized Property Systems. These processes and tools are not described in the Application-specific UOGs.

1.3 Periodic Reviews

This is a living document, and it will be periodically reviewed and updated by SESAAS throughout the property systems life cycle.

2 OVERVIEW

During fiscal year 2002, NASA Headquarters Code JG, Logistics Management, made a decision to centralize the NSMS, NEMS, NPDMS, and NOSC property systems and databases. The Consolidation Center (CC) at the Marshall Space Flight Center (MSFC) was responsible for the sustaining engineering support for these Agencywide core property systems, and the CC provided the centralization support which included setting up the centralized computing environments, developing and testing the core centralized application software systems and consolidated databases, developing data conversion tools, and coordinating the Center-by-Center migration to the centralized property systems.

2.1 OPERATIONAL ENVIRONMENTS

The centralized property systems, often referred to as the Centralized Asset Management (CAM) systems, are installed on NASA Common (NACOMN) and NASA Production (NAPROD) Logical Partitions (LPARs) behind the NACC firewall, as depicted in Figure 1.

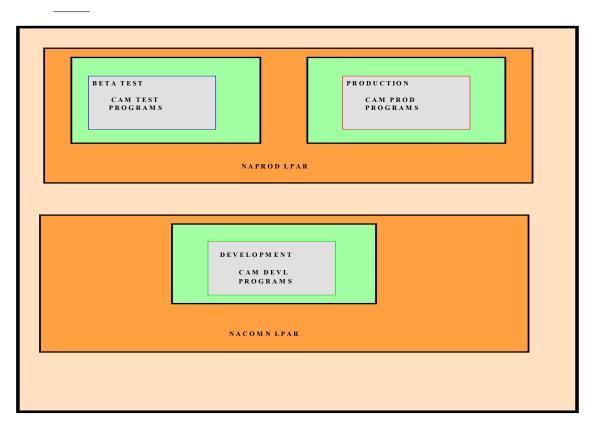


Figure 1. Centralized NASA Property Systems Environments

The centralized database structures, environments and data migration paths established for the property systems are depicted in Figure 2.

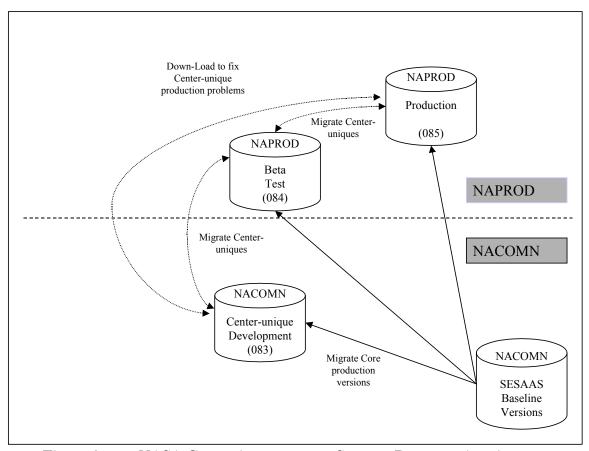


Figure 2. NASA Centralized Property Systems Database Architecture

2.2 System Hardware/Software

System hardware includes the mainframe system and related components, including system memory, disk drives, tape drives, and communications devices.

System software includes the operating systems, database management systems, communications software, and systems management tools. It also includes the configuration and integration of these software components. The NASA centralized property systems operate in the following technical infrastructure:

- Computing Environment -- IBM Enterprise Server, located at the NACC
- Operating System -- IBM Z/OS
- Application Software Software AG Natural, Super Natural, Natural Advanced Facilities, and Natural Connection.
- Database Management System Software AG ADABAS, ADABAS Vista, and associated ADABAS/Natural tools

- Communications Network Wide Area Network (WAN) provided by NASA Integrated Services Network (NISN).
- Local Area Network (LAN) and desktop systems Each participating Center will be responsible for its LAN and desktop systems
- Mainframe Interface Software for WEB Applications Software AG Entire X Broker
- Terminal Emulators BlueZone (web-based), Entire Connection (selected users requiring upload/download capabilities) and others as designated by site requirements.

The NACC Team provides Systems Management, including system monitoring, alert management, database administration, tape management, and problem diagnosis and recovery of the system hardware and system software.

2.2.1 Client Hardware/Software

Each NASA Center using the property systems will be responsible for its LAN and client workstation hardware and software.

3 OPERATIONAL SUPPORT

This section describes the operational support functions and approach to be provided for the centralized property systems. The key areas of operational support and those who are responsible for supporting these areas are addressed in this Section.

3.1 USER ACCESS

Access to the centralized property systems first requires a network access user Identification (ID) and password from the Information Technology (IT) Security Activity located at the user's respective NASA Center.

Personnel requiring access to the centralized property systems environment will also need to obtain three different security levels of access (RACF/ACF2, Natural, and Application) to use the property systems. Figure 3 provides a high-level flow of the process established for granting Mainframe and Natural Security access. More detailed instructions for obtaining the required access can be found in the remainder of this section, in Appendix B, and on the SESAAS Web page.

3.1.1 Mainframe Security

A NACC System Access Request Form and Data Owner Form (See Appendix B) must be filled out and sent to NACC for each user needing access to the property systems. Group IDs, Access Levels and Privileges required for the user may be found in the Centerspecific Transition Agreement (TA). Users should contact their Center's Logistics Management Office for TA information.

Center Developers and Technical Support personnel should request access to NACOMN and NAPROD. Functional End-users need only request access to NAPROD.

3.1.2 Natural Security

Users seeking access to the centralized property systems must also be granted Natural Security access to the operational libraries of the application(s) they need to access. The individual must request Natural Security access through their Center's Technical Support Group (Database Administrator (DBA)/Center Application Security Administrator). The Center Technical Support Group will verify the access is valid and will assist the individual in generating the Property Systems Natural Security Library Access Request Sheet (See Appendix B for an example of this Sheet). The Natural Security Request Sheet should be attached to the NACC Data Owner Approval Form.

NACC will coordinate Natural Security access with the SESAAS DBA.

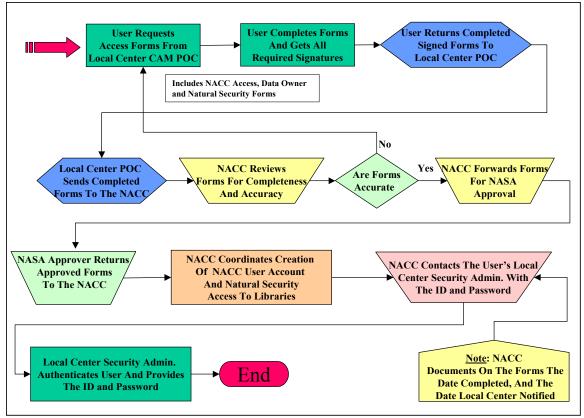


Figure 3. Centralized Property Systems User Access Process Flow

3.1.3 Application-specific Security

The Center Application Security Administrator will grant users access to core application systems via Center-specific application databases. Each application will require separate access.

Access for the NEMS application will be granted by adding the user to the NEMS User ID table (S03). Access for NEMS Inventory will be granted by adding the user to the NEMS Inventory table (S11). Access for NEMS Property Custodian Module (PCM) will be granted by adding the user to the PCM User ID Authority table (C69). Access for the NEMS Web application will be granted by adding a Web User ID, Email Address, and Web User Password to either the Custodian Account Number Table (078) or the User Number Table (090).

Access for the NPDMS application will be granted by adding the user to the User Access table (001).

Access for the NSMS application will be granted by adding the user to the NSMS Security File.

Access for the NOSC application will be granted by the SESAAS NOSC Support Team via a Center-specific generic user ID or by adding the user to the NSMS Customer ID Table for ordering capability.

3.2 USER SUPPORT

Approved users will be supported in resolution of operational problems related to the core centralized property systems. Operational problems are to be processed according to established Help Desk processes and procedures. Sections 3.2.1 through 3.2.4 provide a brief overview of the established Help Desk support groups and their primary responsibilities along with the problem resolution process in place to support end-users.

3.2.1 Help Desk

The User's local Center Help Desk is the first source of support for property systems users. It is the responsibility of the user's Center Help Desk to determine availability of the system to the end user at the local Center and investigate and solve the problem before escalating the problem to the NASA Information Support Center (NISC) / Agencywide NACC Technical Service Center (TSC) Help Desk at MSFC (256-544-6673). For Property Systems users at MSFC, the NISC Help Desk is their first source of support. The NISC/TSC provides Agency-level Help Desk support 24 hours a day, 7 days a week.

The Center's local Help Desk:

- Is the centralized point-of-contact for local users
- Routes user access requests to Center POC for user account administration
- Addresses all problems related to local gateways to remote sites, local networks, user equipment, and peripherals
- Supports the desktop, LAN, and their interaction with the property systems
- Coordinates unresolved issues with the NISC Help Desk
- Statuses Trouble Tickets in their Problem Management and Dispatch System
- Provides status on Trouble Tickets to users, as appropriate
- Notifies the end-user when problem is resolved.

The NISC Help Desk:

- Documents all reported problems in the Problem Management and Dispatch System (PMDS) and generates a Trouble Ticket
- Provides the Trouble Ticket number to the requesting entity for tracking purposes
- Assigns a priority to the Trouble Ticket based on the severity of the problem
- Ensures that all unresolved problems related to centralized property systems are vendored to the appropriate support or maintenance group

- Follows up to ensure the problems are resolved
- Maintains a record of all Trouble Tickets in the PMDS and maintains an accurate status file that is accessible to each NASA Center's Help Desk
- Ensures that all unresolved property systems problems reported to the NISC Help Desk are reported to the appropriate SESAAS Lead for resolution and monitoring.

The NISC interfaces with the centralized Property Systems Support Team through PMDS. The PMDS dispatches an electronic mail message and telephone beeper notice simultaneously to designated Support Team members.

Emergency calls received at the NISC receive immediate response 24 hours a day, 7 days a week. NISC Help Desk calls or pages key personnel in an emergency.

The Property Systems Support Team:

- Responds to an emergency problem immediately 24 hours a day, 7 days a week
- Responds to all problems within 2 hours during normal working hours
- For non-emergency problems reported outside normal working hours, responds during the first 2 hours of the next business day
- Records a description of the problem in the PMDS and tracks the resolution of the problem
- Notifies the NISC Help Desk when the problem is resolved.

The Application Technical Leads (see Appendix F) are the primary points of contact and they will call upon the NACC Support Team as needed.

The Application Technical Lead will escalate problems to members of the property systems Support Team, including SESAAS Development Team, SESAAS DBAs, and NACC Operations Support. The Application Technical Leads may also escalate, as needed, to other MSFC organizations, such as ODIN, NISN, and IT Security.

3.2.2 Problem Resolution

The problem resolution process begins when a problem is reported to the Local Help Desk. The Local Help Desk resolves the issue or calls the NISC Help Desk. The NISC Help Desk generates a Trouble Ticket and resolves the issue or notifies and forwards the Trouble Ticket to the centralized property systems support team.

3.2.3 Priority Classifications

Each Trouble Ticket is assigned a priority according to the severity of the problem.

The following priority codes are used:

- Emergency/Immediate A work stoppage condition exists. A critical component of the system failed and centralized property system(s) cannot continue. Requires an immediate fix.
- **High** A critical component of functionality failed. No workaround exists, but the failure does not prevent use of centralized property systems. Defect must be fixed as soon as possible.
- Medium A non-critical component of a centralized property system failed and a
 workaround exists. Defect must be fixed, and will accompany the next scheduled
 software release.
- Low A minor system problem exists such as a misspelling on a screen or message or a cosmetic problem. The defect will be fixed in the next available release.

3.2.4 Problem Disposition

A description of the each reported problem is recorded in the PMDS. The assigned Application Technical Lead is notified of the Trouble Ticket. The Lead resolves the issue or notifies a group that can resolve it. The Application Technical Lead maintains the status of the Trouble Ticket.

Closure of a problem is defined as: answering a question; resolving a concern; or identifying an application discrepancy and creating a Change Control Request (CCR) to document the discrepancy or requirement change. The Application Technical Lead also generates and submits a CCR to the appropriate Configuration Control Board (CCB) to log and status any application problem.

3.3 SYSTEM AVAILABILITY

The centralized property systems will be available no later than 6:00 AM and until Midnight for all time zones Monday through Saturday, and from 5:00 PM to Midnight Central Time (CT) on non-payroll Sundays and 8:00 AM to Midnight CT on payroll Sundays. Regularly scheduled system maintenance and backups create application "downtime" which is discussed in Section 3.3.1.

Should the property systems become unavailable due to an unexpected problem, the Centers' Local Help Desks will be notified within one hour of loss of service.

3.3.1 Scheduled Maintenance

The normal scheduled system maintenance windows for the centralized property systems are 2:00 AM to 5:00 AM CT Monday through Saturday, 2:00 AM to 4:00 PM CT on non-payroll Sundays and 2:00 AM to 8:00 AM CT on payroll Sundays.

Users may contact the NACC TSC at 256-544-6673 to obtain the current or planned maintenance windows for NACOMN and NAPROD.

When scheduled maintenance outside the normal windows defined above is to be performed on the centralized property systems, the NISC Help Desk and Center POCs (see Table F-2 in Appendix F) will be notified by e-mail 48 hours before the maintenance period. After the system is returned to service, an e-mail will be sent to inform the NISC Help Desk and Center POCs.

3.3.2 Data Backups

Core database backups are run daily during third shift (see Section 3.3.1) and the core applications will not be available during this period.

More information on backups and data restores is provided in Section 3.5.5, Specific Data Backups and Restores.

3.3.3 After normal work-hours

Users must contact the NACC TSC at 256-544-6673 to obtain NACOMN and NAPROD system availability for after hours and weekends.

3.4 SUSTAINING ENGINEERING

Established property systems Configuration Control Boards (CCBs) will interpret, refine, approve, and prioritize CCR requirements.

3.4.1 Core Applications Maintenance

The SESAAS Team will maintain the core centralized property systems. Problems reported to the SESAAS Team through a Trouble Ticket will be resolved. If the resolution requires a change to the core centralized property systems, then the Trouble Ticket will be processed as a CCR through the respective CCB.

Sustaining engineering support will be provided to maintain the core application software and documentation in a current and operational state. Software maintenance is performed in response to regulatory, policy, and environment changes. Software discrepancies (latent defects) will be corrected in a timely manner commensurate with current practice, policy, and procedures. Centers requesting core application user enhancements will be responsible for funding the enhancements.

3.4.2 Release Management Approach

SESAAS follows an approved software development/maintenance life-cycle management approach in sustaining engineering as shown in Figure 4, Release Management Approach. This approach covers all the development-cycle phases (requirement specifications, software design, critical design reviews, code, test readiness reviews, test, verification, operational readiness reviews, and production installation) to varying degrees depending on the complexity of the systems and the required modifications. Even the simplest modification will be subjected to the intent of each of these phases to ensure that the modification is clearly understood, implemented according to the specification, and that the system is not degraded as a result of the modification. The complete development-cycle may take only minutes, hours, or several months depending on the complexity of the modification.

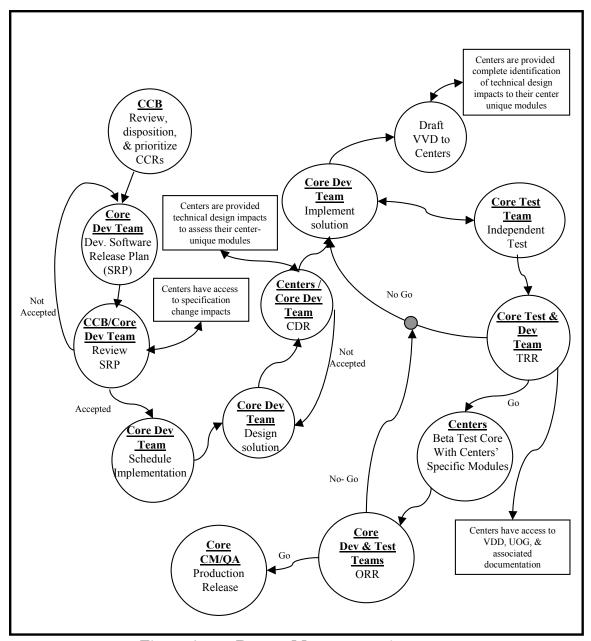


Figure 4. Release Management Approach

The following steps provide a brief overview of the approach used by SESAAS in Software Release Management for the NASA Centralized Property Systems:

- 1. **CCB Review** Core software configuration changes, approved and prioritized by the CCB, are organized into planned releases based on need, (implementation dates established on approved CCRs), and budget constraints.
- 2. **Planned Software Release** Planned Software Releases are discussed at CCB meetings, at the Data Base Administrator's ViTS, and they are posted on the SESAAS Web-site. At this point, Centers will have access to the specification changes to be implemented.

- 3. **Implementation Schedule** A detailed Release Schedule is developed that includes the development-cycle phases listed above. As part of the critical design review, Centers will be provided an overview of the changes to be implemented in the planned software release. Centers will be provided a schedule of major milestones for the planned Software Release.
- 4. **Solution Design** The design solution is prepared by the Core Development Team.
- 5. **Critical Design Review (CDR)** The solution design to the change specifications is presented and reviewed with the Centers for their concurrence on the implementation. At this point the centers will have the information needed to determine the technical design impacts to their center specific modules.
- 6. **Solution Implementation -** Core Software for planned releases is developed or modified in the SESAAS development library on NACOMN.
- 7. **Independent Test** Following approval of the unit and integration tests by the Application Technical Lead, the software is migrated to an independent test library on NACOMN for Independent Test. The Centers will be provided a copy of the draft Version Description Document (VDD) used by the Independent Test group. This advanced copy of the VDD gives the Centers a heads up on the functional and technical changes being made in the release so they may assess impacts to their Center-unique software modules and JCL.
- 8. **Test Readiness Review (TRR)** Upon successful completion of independent functional and regression testing, the Independent Test and Application Development Teams will conduct a Test Readiness Review prior to release of the software for centers' Beta Test. At this point the software may be returned to the Application Development Team for corrections, or it will be released for Center Beta Testing.
- 9. Release Preparation The validated software release version is baselined and packaged for release. Functional and technical changes along with the information necessary for installing the release are finalized in the VDD. The VDD, UOG, and other associated documentation updates are placed on the SESAAS Web Page. The Center POCs (see Table F-2 in Appendix F) will be notified via e-mail confirming the release distribution and the actual date of the release installation. The SESAAS DBA also posts mailbox messages on User logon screens to alert end-users of pending downtimes needed to install the release.
- 10. Center Beta Test The packaged Beta release is installed into the centralized Beta Test database, (see Figure 2 and refer to Appendix J for complete CAM Release Installation Procedures). Centers will normally have up to 30 days to validate Center-unique modules, files, JCL, etc., against a new core version of software before it is installed in the Production database on NAPROD. Should a Center identify a problem with Core software during the Beta test phase, the problem and the planned software release to fix the problem will be posted on the SESAAS Web site, and all Centers will be notified of the posting.

- 11. **Operational Readiness Review** (ORR) Prior to Production Release, the Application Development and Independent Test Teams will conduct an ORR to ensure that all development and test tasks have been completed as specified and that the release is ready for production operations. If the release is not ready, the release will be returned to the Application Development Team. If the release is ready, Final Release Preparation (see Step 9 above) is performed for the Production release, prior to installation.
- 12. **Production Release** Centers will be informed of pending production release installations as part of the Release Preparation (see Step 9 above). Release installations will normally be completed between 5:00 and 6:00 A.M. Central Time, but will start as soon as the nightly NACC backups are completed. The Center technical personnel (see Table J-1 in Appendix J) will be notified via email when the SESAAS DBA starts and completes the centralized core portion of the CAM installation. (See Figure 2 and refer to Appendix J for complete CAM Release Installation Procedures).

Emergency Software Releases are implemented as soon as possible and undergo minimum tests before they are released to the Beta and Production environments. Changes implemented in an emergency release will be re-released in the next planned or scheduled software release version. (See Figure 2 and refer to Appendix J for complete CAM Release Installation Procedures).

In addition to core application maintenance, sustaining engineering support includes the following:

- Help Desk Support
- Configuration Management
- Vendor Software Upgrades.

NACC support will include the following:

- RACF/ACF2 Security
- ZOS Operating System
- Natural and ADABAS Software Systems
- Database Administration
- Backup and Recovery
- CICS and TSO
- Access Mechanisms and Session Managers.

3.4.3 Center-unique software

Centers will be responsible for the sustaining engineering support of their Center-unique software and data files.

3.5 OPERATIONAL PROCESSES AND TOOLS

3.5.1 Job Scheduling

Batch jobs can be placed on a schedule for submittal. Job scheduling is controlled by either center operational staff or through the use of "Control-M" at the NACC. "Control-M" is a scheduling tool supported by the NACC. For job scheduling using "Control-M", see Appendix C for the process and form to be used.

3.5.2 Source Migration

Centers have the capability to migrate Center-unique source code between Center-specific libraries. A structure has been set up and utilities have been provided to move source code between databases (see Figure 2). The Copy To utilities to be used are described in Appendix D.

3.5.3 Super Natural

Super Natural is available for the property systems users. Users running Super Natural queries will need to verify their requirements with SESAAS Application Technical Leads to insure proper configuration, (see Appendix F for appropriate Lead). Users running queries that need modifications must coordinate them with the SESAAS Leads/DBA. The instructions needed to add or migrate Super Natural modules to the centralized environments are in Appendix E.

3.5.4 Virtual Tape vs. Physical Tape

Virtual tapes should be used instead of physical tapes whenever the tape is not to be delivered outside the centralized property system environment. Physical tapes should only be used for shipment of data to another site. The use of virtual tapes results in reduced operator intervention and provides for better efficiency. See Appendix G for instructions on creating Virtual Tapes.

3.5.5 Specific Data Backups and Restores

Center DBAs may create Center-specific backups as required and restore data files as needed from these backups. See Appendix H for guidelines on creating Center-owned backups and the recommended process for restoring data from these backups. Caution: Centers must be careful when restoring data from a backup to ensure that File Definition Tables (FDTs) in the backup match the current Data Description Modules (DDM's). If they do not, the restored files (FDTs) will have to be modified after the data is restored. Determine which release changes are missing from the restored files, and then follow the VDD release install instructions for the missing releases.

Core databases and application software may normally be restored to the last backup according to the target recovery times indicated in Table 1. In general, NACC supported

rollback is possible to any recovery point within the last 4 weeks, but not necessarily within the time objectives listed in Table 1. Data entered after the chosen recovery point for restore will need to be re-entered. See Appendix H for a more detailed description of NACC's daily and weekly ADABAS backup, and disaster/recovery backup approach.

Table 1—Recovery Targets

Scope of Recovery	Recovery Time Objective (from time of approval)	Recovery Point Objective (from point of failure)
Core Database	4 to 8 Hours	Previous Day
Core Software Version	4 Hours	Previous Day
Full Application System Restore	8 to 24 Hours	Previous Day
Disaster Recovery	Reference NACC Disaster Recovery Plan	Reference NACC Disaster Recovery Plan

3.5.6 Changes of Non-Partitioned Files

Center-unique modules that modify non-partitioned files of NEMS and NPDMS must be identified to the NEMS/NPDMS Technical Lead. These files are NEMS NEMS-TABLE and NEMS-TRANSFER and NPDMS ND-TABLE and ND-ERROR. See Appendix I for the Configuration Management (CM) process for these modules.

4 REFERENCE DOCUMENTS

- NASA Property Systems Centralization Implementation Plan
- Application's User Operational Guide
- Centralized Property Systems Requirements Specification
- Center-specific Transition Agreements.

APPENDIX A -- ABBREVIATIONS AND ACRONYMS

ACF2	Access Control Facility 2
ADP	Automated Data Processing
CAM	Centralized Asset Management
CC	Consolidation Center
ССВ	Change Control Board
CCR	Change Control Request
CDR	Critical Design Review
CDT	Central Daylight Savings Time
CICS	Customer Information Control System
CIO	Chief Information Officer
CM	Configuration Management
СТ	Central Time
CTSP	Center Technical Support Personnel
DBA	Database Administrator
GDG	Generation Data Group
DDM	Data Description Module
FDT	File Definition Table
НВ	Handbook
ID	Identification
IT	Information Technology
JCL	Job Control Language
LAN	Local Area Network
LPAR	Logical Partition
MSFC	Marshall Space Flight Center
NACC	NASA Automated Data Processing (ADP) Consolidation Center

NACOMN	NASA Common
NAPROD	NASA Production
NASA	National Aeronautics and Space Administration
NEMS	NASA Equipment Management System
NISC	NASA Information Support Center
NISN	NASA Integrated Services Network
NOSC	NASA Online Supply Catalog
NPDMS	NASA Property Disposal Management System
NSMS	NASA Supply Management System
ODIN	Outsourcing Desktop Initiative for NASA
ORR	Operational Readiness Review
PCM	Property Custodian Module
PMDS	Problem Management and Dispatch System
POC	Point Of Contact
RACF	Resource Access Control Facility
SESAAS	Sustaining Engineering Support for Agencywide Administrative Systems
SRP	Software Release Plan
TA	Transition Agreement
TRR	Test Readiness Review
TSC	Technical Service Center
TSO	Time Sharing Option
UOG	User and Operations Guide
VDD	Version Description Document
ViTS	Video information Teleconference System
WAN	Wide Area Network

APPENDIX B - SYSTEM ACCESS REQUEST FORMS

Three documents are required from all potential users of the centralized property systems. They are:

- 1. NACC SYSTEM ACCESS REQUEST (See Attachment B-I)
- 2. DATA OWNER APPROVAL FORM (See Attachment B-II)
- 3. NATURAL SECURITY REQUEST SHEET (See Attachment B-III)

<u>Note:</u> The Requestor must have obtained a network access ID from his/her appropriate Center Security Office prior to requesting access to the centralized property systems.

Privileged Access and Limited Privileged Access Users must also submit a properly signed PRIVILEGED USER SECURITY SCREENING VERIFICATION sheet (See Attachment B-IV) along with their NACC System Access Request Form. It is unlikely that this level of access will ever be necessary for end-users of the centralized property systems.

All forms must be completed and signed by the requestor and the requester is responsible for obtaining approval signatures from his or her Immediate Supervisor and from the Government designated Functional "Owner" of the applications to which access is being requested. The requestor must then submit the ORIGINAL form, with signatures, to the appropriate Center Security Office at his/her Center. The head of the Center's Security Office must sign the forms and return the forms to the local Center POC. The local Center POC must ensure all forms are complete and mail the original copies to the NACC Security Administrator at Marshall Space Flight Center, Building 4492. The NACC Security Team will obtain any additional authorization signatures required by NASA Agencywide Support Management at MSFC, and will grant the requested access. Finally, the NACC Security Team will coordinate the requestor's access authorization and the dissemination of their initial password with the local Center Security Administrator (See Figure 3 for a high-level flow of this signature/approval process). User password responsibilities and composition requirements are provided in Attachment B-V.

Brief instructions for completion of the above forms are provided in Attachment B-VI.

Samples of completed NACC SYSTEM ACCESS REQUEST Form, DATA OWNER APPROVAL Form, and PROPERTY SYSTEMS NATURAL SECURITY LIBRARY ACCESS REQUEST Sheet are also included in Attachment B-VII.

NACC SYSTEM ACCESS REQUEST

Submit to: NACC Security Administrator, MSFC Building 4492

Name: (Last, First, Middle):	Center/Site:		Mailing Address (Inc	clude Mail Code):
Phone Number:	Electronic Addres	ss:		
	ner Gov. Agency ration (MM/DD/YY)	Contractor Current Userid Company/Organiza	ition:	
SYSTEM	USERID	ACCESS PRIVILEGE/ACCOU	UNT TO MIRROR	DEPARTMENT AREA
□ ARMVS1 □ ARTEMIS (SDEV) □ GRC (LeRC) □ GSCSB1 □ HQSYSB □ JSDMVS □ JSDVM/LINUX(□ JSIMCA, JSIMCB □ KSPR14 □ LAPROD □ MAPROD, MADEVP □ MSMIS □ NACOMN □ NAPROD				
☐ SSPROD				
	_	EM ACCESS (Check One)		
 NON-PRIVILEGED ACCESS: M □ Privileged Access: May bypass or or maintenance-account level access □ Limited Privileged Access: May by 	modify the technical or o	perational system security controls and resources).	(system administrator-le	evel access,
IF PRIVILEGED OR LIMITED PR	EVILEGED ACCESS I	IS REQUESTED, PLEASE INDIC	CATE ADVERSE IMI	PACT MISUSE MAY CAUSE
 □ IT-1 – Very serious adverse impact to NASA missions including but not limited to systems transmitting commands directly modifying the behavior of the spacecraft, satellites or aircraft. □ IT-2 – Serious adverse impact to NASA missions including but not limited to systems: (1) transmitting commands directly modifying the behavior of payloads on spacecraft, satellites or aircraft; or (2) containing the primary copy of data whose cost to replace exceeds \$1M. □ IT-3 – Significant adverse impact to NASA missions, including but limited to those (1) that interconnect with a NASA network in a way that exceeds access by the general public, such as bypassing firewalls; or (2) whose function or data has substantial cost to replace, even if not interconnected with a NASA network. 				
Unauthorized use of the computer accounts and computer resources to which I am granted access is a violation of Section 799, Title 18, U.S. Code; constitutes theft; and is punishable by law. I understand that I am the only individual to access these accounts and will not knowingly permit access by others without written approval. I understand that my misuse of assigned accounts, and my accessing others' accounts without authorization is not allowed. I understand that this/these system(s) and resources are subject to monitoring and recording. I further understand that failure to abide by these provisions may constitute grounds for termination of access privileges, administrative action, and/or civil or criminal prosecution. Justification:				
Group(s):				
Remarks:				
Type of Request:	Permanent Te	mporary (Duration:)		
☐ Delete	Revise			
Signature:				
Supervisor:		Supervisor Signature:		
NASA Approval:				

DATA OWNER APPROVAL FORM

(Must be completed to gain access to any application)

As the Data Owner (or designee) for the	
Name:	Userid:
Email:	Phone No:
Application	
Name:	
Dataset Name	
(High Level Qualifiers):	
Level of Access: Read Write	Allocate
Data Owner Signature: Date:	_

(Must be completed to gain access to any application library)

NASA Center:	Type User (Developer, DBA, End-User):		
Name:		Userid:	
Email:		Phone No:	
Libraries Access Required T	o (Select From List Below	v):	
Signature of Person Requestir	ng Access:		
Name of Person Authorizing	Access (Print):		
Signature of Person Authorizi	ing Access:		
Date:			
List of Libraries for Center Prope	erty System Users		

NAPROD - Test (Database 084), Production (Database 085) or NACOMN - (Database 083)

The Natural Libraries for the Center using the form will be listed here. Separate forms with AGENCY Libraries and with each of the Centers' libraries listed on them follow this page.

(Must be completed to gain access to any application library)

NASA Center:	Type User (Develope	Type User (Developer, DBA, End-User):		
Name:		Userid:		
Email:		Phone No:		
Libraries Access Requ	ired To (Select From List Be	elow):		
			_	
Signature of Person Au	chorizing Access:			
Date:				
List of Libraries for Cente	r Property System Users			
NAPROD – Test (Database	e 084), Production (Database 085	5) or NACOMN – (Database 083)		
Agency (Core)				

NAPROD - Test (dbid=084)

AGNETEST - NEMS Core Test library AGNITEST - NEMS Inventory Core Test library AGNMTEST - NEMS PCM Core Test library AGNDTEST - NPDMS Core Test library

AGNSTEST- NSMS Core Test library

NAPROD - Production (dbid=085)

AGNEPROD - NEMS Core Production library

AGNIPROD - NEMS Inventory Core Production library AGNMPROD - NEMS PCM Core Production library AGNDPROD - NPDMS Core Production library AGNSPROD - NSMS Core Production library

(Must be completed to gain access to any application library)

NASA Ce	nter:	Type User (Developer, DB	A, End-User):
Name:			Userid:
Email: Pl			Phone No:
Libraries A	Access Required	To (Select From List Below):	
Signature o	f Person Request	ing Access:	
Name of Pe	erson Authorizing	Access (Print):	
Signature o	f Person Authoriz	zing Access:	
Date:			
List of Libra	ries for Center Pro	perty System Users	
NAPROD – T	Γest (Database 084)	, Production (Database 085) or N.	ACOMN – (Database 083)
Ames			
NAPROD – Test	t (dbid=084)		
ARNETEST	- Ames NEMS Test	library - Steplib to AGNETEST	
ARNITEST	- Ames NEMS Inventory Test library – Steplib to AGNITEST		
ARNDTEST	- Ames NPDMS Tes	st library – Steplib to AGNDTEST	
ARNSTEST	- Ames NS	SMS Test library – Steplib to AGNSTEST	
NAPROD – Pro	duction (dbid=085)		
ARNEPROD	- Ames NEMS Prod	uction library - Steplib to AGNEPROD	
ARNIPROD	- Ames NI	EMS Inventory Production library – Steplib t	o AGNIPROD
ARNDPROD		duction library – Steplib to AGNDPROD	
ARNSPROD	 Ames NSMS Prod 	uction library – Steplib to AGNSPROD	

(Must be completed to gain access to any application library)

NASA Cer	nter:	Type User (Developer, DBA, End	d-User):
Name:			Userid:
Email:			Phone No:
Libraries A	Access Required T	o (Select From List Below):	
Signature of	Person Requestir	ng Access:	_
Name of Per	rson Authorizing	Access (Print):	
Signature of	Person Authorizi	ng Access:	
Date:			
List of Librar	ies for Center Prope	erty System Users	
NAPROD – T	est (Database 084),	Production (Database 085) or NACOM	N – (Database 083)
Dryden			
NAPROD – Test	(dbid=084)		
DFNETEST	- Dryden NEMS Test	library – Steplib to AGNETEST, then DFCOTEST	
DFNITEST	- Dryden NEMS Inver	ntory Test library - Steplib to AGNITEST, then DF	COTEST
DFNMTEST	- Dryden NEMS PCM Test library - Steplib to AGNMTEST, then DFCOTEST		TEST
DFNDTEST	- Dryden NPDMS Tes	t library - Steplib to AGNDTEST, then DFCOTES	Γ
DFNSTEST	- Dryden NSMS Test	library – Steplib to AGNSTEST, then DFCOTEST	
DFCOTEST	- Dryden Common Ro	outine Library	
NAPROD – Prod	luction (dbid=085)		
DFNEPROD	- Dryden NEMS Produ	uction library - Steplib to AGNEPROD, then DFCC	PROD
DFNIPROD	- Dryden NEMS Inver	ntory Production library - Steplib to AGNIPROD, the	nen DFCOPROD
DFNMPROD	- Dryden NEMS PCM	Production library - Steplib to AGNMPROD, then	DFCOPROD
DFNDPROD	- Dryden NPDMS Pro	duction library - Steplib to AGNDPROD, then DFO	COPROD
DFNSPROD	- Dryden NSMS Produ	action library - Steplib to AGNSPROD, then DFCC	PROD
DFCOPROD	- Dryden Common Ro	outine Library	

(Must be completed to gain access to any application library)

NASA Center:	Type User (Developer, DBA, End-U	Jser):
Name:		Userid:
Email:		Phone No:
Libraries Access Required To	o (Select From List Below):	
Signature of Person Requestin	ng Access:	
Name of Person Authorizing A	Access (Print):	
Signature of Person Authorizi	ng Access:	
Date:		
List of Libraries for Center Prope	erty System Users	

NAPROD - Test (Database 084), Production (Database 085) or NACOMN - (Database 083)

Glenn

NAPROD - Test (dbid=084)

GRNETEST - Glenn NEMS Test library - Steplib to AGNETEST GRNITEST -Glenn NEMS Inventory Test library - Steplib to AGNITEST GRNDTEST - Glenn NPDMS Test library - Steplib to AGNDTEST GRNSTEST-Glenn NSMS Test library - Steplib to AGNSTEST

GRNETRO -Glenn NEMS Read-only library * GRNDTRO -Glenn NPDMS Read-only library * GRNSTRO -Glenn NSMS Read-only library *

NAPROD - Production (dbid=085)

GRNEPROD - Glenn NEMS Production library - Steplib to AGNEPROD GRNIPROD-Glenn NEMS Inventory Production library - Steplib to AGNIPROD GRNDPROD Glenn NPDMS Production library - Steplib to AGNDPROD GRNSPROD - Glenn NSMS Site Unique Production library - Steplib to AGNSPROD

GRNEPRO -Glenn NEMS Read-only library * GRNDPRO -Glenn NPDMS Read-only library * GRNSPRO -Glenn NSMS Read-only library *

^{*} Report mode, Read access to all NEMS, NPDMS, and NSMS files, go directly to next prompt (no menu)

^{*} Report mode, Read access to all NEMS, NPDMS, and NSMS files, go directly to next prompt (no menu)

(Must be completed to gain access to any application library)

NASA Center:	Type User (Devel	oper, DBA, End-User):
Name:	,	Userid:
Email:		Phone No:
Libraries Access Requ	nired To (Select From List	Below):
Signature of Person Re	questing Access:	
Name of Person Author	rizing Access (Print):	
Signature of Person Au	thorizing Access:	
Date:		
List of Libraries for Cente	er Property System Users	
NAPROD – Test (Databas	e 084), Production (Database	085) or NACOMN – (Database 083)

Goddard

NAPROD - Test (dbid=084)

GSNETEST - Goddard NEMS Test library - Steplib to AGNETEST

GSNITEST - Goddard NEMS Inventory Test library - Steplib to AGNITEST
GSNMTEST - Goddard NEMS PCM Test library - Steplib to AGNMTEST
GSNDTEST - Goddard NPDMS Test library - Steplib to AGNDTEST

GSNDTGND - Goddard GNPDMS library *

$NAPROD-Production\ (dbid=085)$

GSNEPROD - Goddard NEMS Production library – Steplib to AGNEPROD
GSNIPROD - Goddard NEMS Inventory Production library – Steplib to AGNIPROD
GSNMPROD - Goddard NEMS PCM Production library – Steplib to AGNMPROD
GSNDPROD - Goddard NPDMS Production library – Steplib to AGNDPROD
GSNDPGND - Goddard GNPDMS library *

^{*} Structured mode, update to all NPDMS files (except for ND-TABLE and ND-ERROR), , startup task - GDM100PA.

^{*} Structured mode, update to all NPDMS files (except for ND-TABLE and ND-ERROR), startup task - GDM100PA.

J5NSPROD

PROPERTY SYSTEMS NATURAL SECURITY LIBRARY ACCESS REQUEST

(Must be completed to gain access to any application library)

NASA Ce	nter:	Type User (Developer, DB.	A, End-User):
Name:			Userid:
Email:			Phone No:
Libraries A	Access Required T	o (Select From List Below):	
Signature o	f Person Requestir	ng Access:	
Name of Pe	erson Authorizing	Access (Print):	
Signature o	f Person Authorizi	ng Access:	
Date:			
List of Libra	ries for Center Prope	erty System Users	
NAPROD – T	Γest (Database 084),	Production (Database 085) or NA	ACOMN – (Database 083)
Johnson			
NAPROD – Test	t (dbid=084)		
J5NETEST	- Johnson NEMS Test	library - Steplib to AGNETEST	
J5NITEST	- Johnson NEMS Inve	ntory Test library – Steplib to AGNITEST	
J5NMTEST	- Johnson NEMS PCN	1 Test library – Steplib to AGNMTEST	
J5NDTEST	- Johnson NPDMS Te	st library – Steplib to AGNDTEST	
J5NSTEST	- Johnson NSMS Test	library - Steplib to AGNSTEST	
NAPROD – Pro	duction (dbid=085)		
J5NEPROD	- Johnson NEMS Proc	uction library – Steplib to AGNEPROD	
J5NIPROD	- Johnson NEMS Inve	ntory Production library - Steplib to AGNI	PROD
J5NMPROD	- Johnson NEMS PCN	1 Production library – Steplib to AGNMPR	OD
J5NDPROD	- Johnson NPDMS Production library – Steplib to AGNDPROD		

- Johnson NSMS Production library – Steplib to AGNSPROD

(Must be completed to gain access to any application library)

Select From List Belo	
	ow):
Access:	
cess (Print):	
Access:	
y System Users	
oduction (Database 085)	or NACOMN – (Database 083)
ETEST O TO AGNITEST AGNMTEST IDTEST OF NEMS-TABLE, NEMS-TRANSFER, NI	D-TABLE, and ND-ERROR), go directly to next prompt
010 (NASA)** 015 (J-BOSC) ** 016 (SFOC) ** 018 (PGOC) ** 10?? **	D-TABLE, and ND-ERROR), go directly to next prompt
	SACCESS: Y System Users Display System Use

(Must be completed to gain access to any application library)

NASA Center:	Type User (Developer, DBA, End-User):					
Name: Userid:						
Email:		Phone No:				
Libraries Access Required To	o (Select From List Belov	v):				
C: (CD D						
Signature of Person Requestin	g Access:					
Name of Person Authorizing	Access (Print):					
Signature of Person Authorizi	ng Access:					
Date:						
List of Libraries for Center Prope	erty System Users					
NAPROD – Test (Database 084),	Production (Database 085) o	r NACOMN – (Database 083)				
Langley						

L

NAPROD - Test (dbid=084)

LANETEST - Langley NEMS Test library - Steplib to AGNETEST $LANITEST\ -\ Langley\ NEMS\ Inventory\ Test\ library-Steplib\ to\ AGNITEST$ LANDTEST - Langley NPDMS Test library - Steplib to AGNDTEST

LANSTEST - Langley NSMS Test library - Steplib to AGNSTEST

LANETINQ - Langley NEMS inquiry library *

- Langley NPDMS inquiry library * LANDTINQ

LANSTINQ - Langley NSMS inquiry library *

NAPROD - Production (dbid=085)

LANEPROD - Langley NEMS Production library - Steplib to AGNEPROD LANIPROD - Langley NEMS Inventory Production library - Steplib to AGNIPROD LANDPROD - Langley NPDMS Production library - Steplib to AGNDPROD

LANSPROD - Langley NSMS Production library - Steplib to AGNSPROD

LANEPINQ - Langley NEMS inquiry library * LANDPINQ- Langley NPDMS inquiry library * LANSPINQ - Langley NSMS inquiry library *

^{*} Report mode, Read only to all NEMS, NPDMS, and NSMS files and site unique files, go directly to next prompt

^{*} Report mode, Read only to all NEMS, NPDMS, and NSMS files and site unique files, go directly to next prompt

(Must be completed to gain access to any application library)

NASA Center:	Type User (Developer, DBA, End-User):			
Name:		Userid:		
Email:		Phone No:		
Libraries Access Required To	o (Select From List Below):			
Signature of Person Requestin	g Access:			
Name of Person Authorizing	Access (Print):			
Signature of Person Authorizi	ng Access:			
Date:				
List of Libraries for Center Prope	erty System Users			

NAPROD - Test (Database 084), Production (Database 085) or NACOMN - (Database 083)

Marshall

NAPROD - Test (dbid=084)

MSNETEST - Marshall NEMS Test library - Steplib to AGNETEST

MSNITEST - Marshall NEMS Inventory Test library - Steplib to AGNITEST

 $MSNMTEST \ \ - Marshall \ NEMS \ PCM \ Test \ library - Steplib \ to \ AGNMTEST$

MSNDTEST - Marshall NPDMS Test library - Steplib to AGNDTEST

MSNSTEST - Marshall NSMS Test library - Steplib to AGNSTEST

MSNETINQ - Marshall NEMS inquiry library *

MSNDTINQ - Marshall NPDMS inquiry library *

MSNSTINQ - Marshall NSMS inquiry library *

* Report mode, update to all NEMS, NPDMS, and NSMS files and site unique files (except for NEMS-TABLE, NEMS-TRANSFER, ND-TABLE, and ND-ERROR), go directly to next prompt, Clear source area set to 'Y'

NAPROD - Production (dbid=085)

MSNEPROD - Marshall NEMS Production library - Steplib to AGNEPROD

MSNIPROD - Marshall NEMS Inventory Production library - Steplib to AGNIPROD

MSNMPROD - Marshall NEMS PCM Production library - Steplib to AGNMPROD

MSNDPROD - Marshall NPDMS Production library - Steplib to AGNDPROD

MSNSPROD - Marshall NSMS Production library - Steplib to AGNSPROD

MSNEPINQ - Marshall NEMS inquiry library *

MSNDPINQ - Marshall NPDMS inquiry library *

MSNSPINQ - Marshall NSMS inquiry library *

^{*} Report mode, update to all NEMS, NPDMS, and NSMS files and site unique files (except for NEMS-TABLE, NEMS-TRANSFER, ND-TABLE, and ND-ERROR), go directly to next prompt, Clear source area set to 'Y

(Must be completed to gain access to any application library)

NASA Center:	Type User (Develope	er, DBA, End-User):
Name:		Userid:
Email:		Phone No:
Libraries Access Re	quired To (Select From List Bo	elow):
	•	
Signature of Person F	Requesting Access:	
N. OD 1. 1		
Name of Person Auth	norizing Access (Print):	
Signature of Person A	Authorizing Access:	
Date:		
List of Libraries for Cei	nter Property System Users	
NAPROD – Test (Datab	ase 084), Production (Database 08	5) or NACOMN – (Database 083)
Stennis		
NAPROD – Test (dbid=084)		
SSNETEST - Stennis NEMS Test librar		
SSNITEST - Stennis NEMS Inventory		
SSNMTEST - Stennis NEMS PCM Test SSNDTEST - Stennis NPDMS Test libra		
SSNSTEST - Stennis NSMS Test library		
SSNETEIX - Stennis NEMS programm	-	

NAPROD - Production (dbid=085)

SSNEPROD - Stennis NEMS Production library – Steplib to AGNEPROD

SSNIPROD - Stennis NEMS Inventory Production library – Steplib to AGNIPROD

SSNMPROD - Stennis NEMS PCM Production library – Steplib to AGNMPROD

SSNDPROD - Stennis NPDMS Production library – Steplib to AGNDPROD

SSNSPROD - Stennis NSMS Production library – Steplib to AGNSPROD

SSNEPFIX - Stennis NEMS programmer fix library *
SSNDPFIX - Stennis NPDMS programmer fix library *
SSNSPFIX - Stennis NSMS programmer fix library *

SSNDTFIX - Stennis NPDMS programmer fix library *
SSNSTFIX - Stennis NSMS programmer fix library *

^{*} Report mode, update to all NEMS, NPDMS, and NSMS files and site unique files (except for NEMS-TABLE, NEMS-TRANSFER, ND-TABLE, and ND-ERROR), go directly to next prompt, Clear source area set to 'N' (to drag across modules)

^{*} Report mode, update to all NEMS, NPDMS, and NSMS files and site unique files (except for NEMS-TABLE, NEMS-TRANSFER, ND-TABLE, and ND-ERROR), go directly to next prompt, Clear source area set to 'N' (to drag across modules)

PRIVILEGED USER SECURITY SCREENING VERIFICATION

All privileged/limited-privileged users must successfully pass a "security check" and ALL employees must attend an IT security briefing prior to gaining access to this system (NPG 2810 A.6.2.1). Only the Security Administrator is authorized to add highly privileged users to this system(s).

The Safety/Security Office must indicate by sprivileged user has successfully passed a personal process.	
Security:	_
(PLEASE PRINT)	
Signature:	_
All managers must check the box below:	
This employee has attended an IT S	ecurity Briefing

PASSWORD COMPOSITION REQUIREMENTS

Users are responsible for any and all activity generated through the use of their user IDs and passwords. Users will not store passwords in program function keys or automated logon sequences. You are responsible for all activity that occurs as a result of deliberately revealing your password. Passwords must be known only by the individual and must not be shared. Group passwords are not permitted. You will not be permitted to reuse a password for 10 generations. All passwords must meet the following criteria:

- All passwords must be 8 characters in length and contain at least three of the following sets of characters: uppercase letters, lowercase letters, numbers, and special characters.
- The password must not be equal to the user ID.
- The password must not be a dictionary word.
- The password must not be either wholly or predominantly composed of the following:
 - The user's ID, owner's name, birth date, Social Security Number, family member or pet names, names spelled backwards, or other personal information about the user
 - Any contractor name
 - The division or branch name
 - Repetitive or keyboard patterns (for example, "abc#abc#", "1234", "qwer", "mnbvc", or "aaa#aaaa")
 - The name of any automobile or sports team
- The password must not be a word found in a dictionary of any language or a dictionary word with numbers appended or prepended to it.
- The password must not be the name of a vendor product or a nickname for a product.

Please ensure information is complete. Incomplete forms cannot be processed. Return completed form(s) to the NACC Security Administrator at MSFC Building 4492. The form(s) may be FAXed to 256-544-5512. Please address all questions to 256-544-6013.

NAME - Full name of user requesting system access.

CENTER/SITE - Associated NASA site

MAILING ADDRESS - Street, city, state, zip code, and mail code where individual receives mail.

PHONE NUMBER - Work phone number with area code. Where applicable, include extension.

ELECTRONIC MAIL ADDRESS - Internet electronic mail address, if available.

EMPLOYED BY - Check appropriate employer: NASA, other government agency, or by a contractor.

CURRENT USERID - Designate current userid if existing.

CONTRACT # - If employed by a contractor, include contract number

EXPIRATION DATE – If employed by a contractor, include date contract expires.

COMPANY/ORGANIZATION -- Name of company, agency, or section who employs the user.

SYSTEM -- Check the box(es) for each system to which access is requested,

USERID – Users should designate what they would like their userid to be on each system to which they are requesting access. If the system does not support the requested userid, NACC Security personnel will notify the user of their assigned userid when the new password is communicated.

ACCESS PRIVILEGE – This field should be used to designate what type of privilege the user will need on each system; i.e., TSO, JOB, CICS, etc.

DEPARTMENT AREA – Users should designate the department within their organization to which they are assigned.

ACCESS REQUIRED- Specifies the required access; i.e., Non-privileged, Privileged, or Limited Privileged access. See access form for explanation.

JUSTIFICATION - Designate why the access is required.

GROUPS: -- Designate the group(s) to which the user is to be connected.

REMARKS: -- This area is reserved for any additional information that will assist in creating the user's account. For example, use this area to designate an existing USERID, which can be used as a model for this new account.

TYPE OF REQUEST -- Check "new" for a new user, then check "permanent" or "temporary". If you check "temporary", then designate a duration. Check "delete" to remove a USERID from the system. This action removes the individual's USERID, datasets, and access to the system. Check "revise" to update any information designated on the form.

SIGNATURE -- The individual who is requesting the USERID must read the statement and sign the form.

DATE -- The date individual signed the form.

SUPERVISOR -- For civil servants, the individual's supervisor's name and signature are required. For contractors, a

COTR signature is required.

NASA APPROVAL: -- Appropriate NASA official signature

PRIVILEGED USER SECURITY SCREENING VERIFICATION: -- Prior to adding any privileged user (i.e, security, non-cncl, operations, audit, account), a copy of the background check must be attached, indicating that the user has successfully passed the security check.

DATA OWNER APPROVAL: -- Prior to ANY user gaining access to an application, the Data Owner (or his/her designee) must indicate their approval by filling out and signing this form.

NACC SYSTEM ACCESS REQUEST

Submit to: NACC Security Administrator, MSFC Building 4492

Name: (Last, First, Middle):		Center/Site:		Mailing Addre	ess (Include Mail Code):	
SampleNACC, John R.	ARC			ARC Mail Drop 123		
Phone Number:	Electronic Address:					
650-604-5555		John.SampleN				
Employed By: X NASA	☐ Other Gov. Agency ☐ Contractor Current Userid SAMPLJI				SAMPLJR	
Contract #	Exp	piration (MM/D	D/YY) Comp	pany/Organizati	on:	
SYSTEM		USERID	ACCESS PRIVILEGE/ACC MIRROR	COUNT TO	DEPARTMENT AREA	
ARMVS1						
☐ ARTEMIS (SDEV)	/////	///////////////////////////////////////	THIS IS A SAMPLE NACC	FORM	///////////////////////////////////////	
☐ GRC (LeRC) ☐ GSCSB1						
☐ HQSYSB						
☐ JSDMVS						
☐ JSDVM/LINUX(
☐ JSIMCA, JSIMCB						
☐ KSPR14						
☐ LAPROD ☐ MAPROD, MADEVP						
☐ MAPROD, MADEVP						
☐ NACOMN						
X NAPROD	SAN	1PLJR	CICS, R,E		AW 444	
☐ SSPROD	TVDI	E OF DECLUDE	D SYSTEM ACCESS (Check (Oma)		
			`			
only)	ESS: N	Aay NOT bypass	security controls (user-level acce	ess to application	is and limited systems resources	
			nical or operational system secur controls and resources).	rity controls (syst	em administrator-level access,	
Limited Privileged Access certain system resources).	May	bypass security c	controls for part of a system but n	not the entire syst	em (access to controls for	
IF PRIVILEGED OR LIMIT MISUSE MAY CAUSE	ED PI	REVILEGED A	CCESS IS REQUESTED, PLE	EASE INDICAT	E ADVERSE IMPACT	
☐ IT-1 – Very serious advers modifying the behavior of th			sions including but not limited to or aircraft.	systems transmi	itting commands directly	
			including but not limited to syste atellites or aircraft; or (2) contain			
*	imnac	t to NASA missi	ons, including but limited to thos	se (1) that interco	nnect with a NASA network in	
	the go	eneral public, suc	ch as bypassing firewalls; or (2) v			
Unauthorized use of the computer accounts and computer resources to which I am granted access is a violation of Section 799, Title 18, U.S. Code; constitutes theft; and is punishable by law. I understand that I am the only individual to access these accounts and will not knowingly permit access by others without written approval. I understand that my misuse of assigned accounts, and my accessing others' accounts without authorization is not allowed. I understand that this/these system(s) and resources are subject to monitoring and recording. I further understand that failure to abide by these provisions may constitute grounds for termination of access privileges, administrative action, and/or civil or criminal prosecution. Justification:						
oustineation.						
			- AAD2RKK - NEMS, NSMS, I in existing privileges*****	End User		
Type of Request:	New	☐ Permanent	Temporary (Duration:)		
	Delet		Date:			
Supervisor:			Supervisor Sig	gnature:		
NASA Approval:						

Sample*****DATA OWNER APPROVAL FORM*****Sample

(Must completed to gain access to any application)

As the Data Owner (or designee) for the **NEMS**application residing on the NASA Automated Data Processing (ADP) Consolidated Processing Center (NACC), I hereby authorize the NACC administrators to provide the access indicated below:

Name: Sample NACC, John R.	Userid: SAMPLJR
Email: John.sampleNACC@arc.nasa.gov	Phone No: 650-604-5555
Application	
Name: NEMS	
Dataset Name	
(High Level Qualifiers):	
Level of Access: X Read	ocate X Execute
Data Owner Signature:	
Date:	

(Must be completed to gain access to any application library)

NASA Cente	er: SSC	Type User (Developer, DBA, End-User):			
Name:			Userid:		
Email:			Phone No:		
Libraries Ac	cess Required To	o (Select From List Below):			
Signature of F	Person Requestin	ng Access:			
Name of Pers	on Authorizing	Access (Print):			
Signature of F	Person Authorizi	ng Access:			
Date:					
List of Libra	ries for Stennis	Space Center Property System Use	<u>rs</u>		
NAPROD – T (Database 083	`	84), Production (Database 085) or NA	COMN – Dev.		
SSNEPROD	- Stennis NEMS	Production library – Steplib to AGNEPF	ROD		
SSNIPROD	- Stennis NEMS	Inventory Production library – Steplib to	AGNIPROD		
SSNMPROD	- Stennis NEMS	PCM Production library – Steplib to AG	NMPROD		
SSNDPROD	- Stennis NPDM	S Production library – Steplib to AGNDI	PROD		
SSNSPROD	- Stennis NSMS	Production library – Steplib to AGNSPR	OD		
SSNEPFIX	- Stennis NEMS	programmer fix library *			
SSNDPFIX	- Stennis NPDM	S programmer fix library *			
SSNSPFIX	- Stennis NSMS	programmer fix library *			
SYSSN	- Stennis Superl	Natural Library			
(except for NI	EMS-TABLE, N	NEMS, NPDMS, and NSMS files and IEMS-TRANSFER, ND-TABLE, and source area set to 'N' (to drag across	ND-ERROR), go		

APPENDIX C -- CONTROL M FORM

Control M

Job Scheduling Information Form

The form in Attachment C-I should be filled out for all jobs that need to be scheduled. The form can be found at http://www.msfc.nasa.gov/sesaas/ in the Centralization Info folder for the appropriate Property System Application. A separate form needs to be filled out for each job. The TAB key can be used to move from field to field. Completed forms should be forwarded to the contacts listed on the bottom of the form.

Datasets where Control-M JCL should reside:

Production

AGCAM.NEMSP.CTM.JCL

ARCAM.NEMSP.CTM.JCL

DFCAM.NEMSP.CTM.JCL

GRCAM.NEMSP.CTM.JCL

GSCAM.NEMSP.CTM.JCL

J5CAM.NEMSP.CTM.JCL

KSCAM.NEMSP.CTM.JCL

LACAM.NEMSP.CTM.JCL

MSCAM.NEMSP.CTM.JCL

SSCAM.NEMSP.CTM.JCL

Test

AGCAM.NEMST.CTM.JCL

ARCAM.NEMST.CTM.JCL

DFCAM.NEMST.CTM.JCL

GRCAM.NEMST.CTM.JCL

GSCAM.NEMST.CTM.JCL

J5CAM.NEMST.CTM.JCL

KSCAM.NEMST.CTM.JCL

LACAM.NEMST.CTM.JCL

MSCAM.NEMST.CTM.JCL

SSCAM.NEMST.CTM.JCL

CONTROL-M JOB SCHEDULING INFORMATION FORM

DATE:

JOB INFORMATION: (PLEASE TAB TO FIELDS AND FILL OUT ALL PERTINENT INFORMATION)
NEW job \square , CHANGE EXISTING job \square , DELETE job \square , TEMPORARY stop the job listed in field 1, \square , RESTART job listed in field 1 that was temporarily stopped \square
01.) JOB NAME: 02.) DATA SET LOCATION OF JCL (PDS):
03.) DATASET MEMBER: 04.) TIME TO START JOB: 05.) HOW LONG JOB RUNS:
06.) LIST THE TIME SPAN THAT THE JOB CAN START IN CASE OF DISCREPANCIES:
07.) ANY JOB RELATIONSHIPS TO THIS JOB, PLEASE EXPLAIN (jobs that must run before or after)
08.) DOES THE JOB REQUIRE AN APPLICATION or DATABASE SUCH AS IMS, CICS, DB2, ADABAS, ETC. TO BE UP OR DOWN, IF SO LIST THE EXACT NAMES
09.) APPLICATION NAME (NPDMS, NSMS, NEMS, ETC.):
10.) SYSTEM NAME (EX: NAPROD, MSMIS)
11.) LIST THE ACCEPTABLE CONDITION CODES (EX: 4 OR LESS, 0 ONLY):
12.) MARK DAY/S, WEEKS, MONTHS. IF THE JOB RUNS BI-WEEKLY MONTHLY, QUARTER LY or YEARLY, PLEASE EXPLAIN AND MARK PERTINENT BOXES BELOW.
MON TUE WED THU FRI SAT SUN
WEEK1 WEEK2 WEEK3 WEEK5
JAN □FEB □MAR□ARR □MAY □JUN □JUL □AUG □SEP □OCT □NOV □ DEC□
13.) DO YOU WANT THE JOB TO RUN ON HOLIDAYS:14.) IF NOT, AND ITS APPLICABLE, DO YOU WANT THE JOB TO RUN BEFORE ☐ OR AFTER ☐ THE HOLIDAY
15.) DO YOU WANT TO BE CONTACTED IF THE JOB ENDS ABNORMALLY: YES ☐ No ☐ 16.) IF YES, NAME: PHONE: WHAT ABNORMAL CONDITIONS:
17.) OTHER SPECIAL JOB REQUIREMENTS, OR CONCERNS YOU HAVE:

USER INFORMATION:

NAME: __PHONE: __BLDG: __RM:

 $MAIL\ CODE: \underline{\hspace{1.5cm}}\ COMPANY: \underline{\hspace{1.5cm}}\ CITY: \underline{\hspace{1.5cm}}\ STATE:$

NOTES:

- 1. IF THE HOLIDAY FALLS ON SATURDAY THEN THE OBSERVED HOLIDAY WILL BE FRIDAY.
- 2. IF THE HOLIDAY FALLS ON SUNDAY THEN THE OBSERVED HOLIDAY WILL BE MONDAY

ANY SCHEDULING CONCERNS, CONTACT CRAIG SAILE OR NORM EASTERWOOD AT 256-544-8862 or 256-544-3132, EMAIL ADDRESS 'CRAIG,SAILE@MSFC.NASA.GOV' and 'NORMAN.EASTERWOOD@MSFC.NASA.GOV'.

Attachment C-I – Control M Form

APPENDIX D – CENTER-UNIQUE SOURCE CODE MIGRATION

INTRODUCTION

The SESAAS DBA has created tools to migrate Center-unique source code between databases for the NASA Centralized Property Systems. These tools have been created with the following parameters in mind.

- A center may move read-only source code in libraries where Natural Security links allow READ-ONLY access to data files.
- The performance of center unique code moved into the NAPROD Production environment will be monitored to determine if there are any impacts on core code to include runaway modules or modules that impact Production code performance.
- The code should be developed and tested on the development LPAR (NACOMN) before moving the code to the Production environment (NAPROD).
- Code that modifies the non-partitioned Core tables and fit the criteria established in Appendix H, "Changes of Non-Partitioned Files (Common)", must be approved by the Application Lead and cataloged by the SESAAS DBA. The remaining Center-unique code can be moved as desired.

PURPOSE

The purpose of this Appendix is to establish the method of migrating Center-unique code between databases. This Appendix will describe the use of the CPYTO tools and other migration tools to move source code between the databases established for the Centralized Property Systems.

SCOPE

This Appendix will describe the use of the CPYTO tools to migrate Center-unique code on the NAPROD LPAR. This appendix will also describe the use of the CNMIGRAT tools to migrate Center-unique code on both the NAPROD LPAR and NACOMN LPAR.

CPYTO084

Based on the source code migration parameters established in the property systems centralization project, a utility to transfer source code between databases on the same LPAR (NAPROD) has been written. At the NEXT prompt in Natural library on the TEST database (084), invoke **CPYTO084**. This utility will allow modules to be copied from the PRODUCTION database (085) to the TEST database (084). Users can copy a single module or utilize a wildcard (*). The wildcard can be for all modules (*) or modules that start with a certain value (RPT*). A batch job will be submitted which

unloads the specified source code from the PRODUCTION database (085), loads it to the TEST database (084), and the CATALLS the module(s) that were specified. The user will be "notified" when the batch job ends. Check to make sure the job ran correctly. The job name will be the User ID prefixed with the letter 'P'.

CPYTO085

Based on the source code migration parameters established in the property systems centralization project, a utility to transfer source code between databases on the same LPAR (NAPROD) has been written. At the NEXT prompt in Natural library on the TEST database (084), invoke **CPYTO085**. This utility will allow modules to be copied from the TEST database (084) to the PRODUCTION database (085). Users can copy a single module or utilize a wildcard (*). The wildcard can be for all modules (*) or modules that start with a certain value (RPT*). A batch job will be submitted which unloads the specified source code from the TEST database (084), loads it to the PRODUCTION database (085), and the CATALLS the module(s) that were specified. The user will be "notified" when the batch job ends. Check to make sure the job ran correctly. The job name will be the User ID prefixed with the letter 'P'.

UNLOADING SOURCE CODE

Based on the source code migration parameters established in the property systems centralization project, a utility to transfer source code between databases has been written. While in Natural in the database from which you wish to transfer source code:

- 1. Invoke program **CNMIGRAT**. Depressing PF1 will take the user out at any point in the process.
- 2. On the subsequent menu, place any non-blank character next to the UNLOAD path the user wishes the source code to follow. Make only one selection.
- 3. On the next menu the user may enter the sending and receiving libraries, and up to 20 object names to be copied. Wildcards do work.
- 4. After confirming that the user wishes the migration to continue, a batch job will be submitted, whose name is the user-id, prefixed with the letter 'P'. Also, the name of the dataset created in this step will be displayed.
- 5. THE USER MUST COPY OR WRITE DOWN THE DATASET NAME, as it is required in the load step.
- 6. Shortly, the user will receive notification (with the job name and number) from the system that the job is complete. MAKE CERTAIN TO CHECK THE JOB in the output queue, to insure it ran successfully and copied the objects you wanted copied.

7. Proceed to the database into which the objects are to be copied.

NOTE:

The dataset name carries some useful information. A sample follows:

AGCAMX.MS.DVL.TO.TST.SMITHXX.D051103.T150748

AGCAMX -always contains this high-level qualifier

MS -Center code abbreviation

DVL -the sending environment

TO -literal

TST -the receiving environment

SMITHXX -your user-id

D051103 -the dataset creation date
T150748 -the dataset creation time

These (temporary) datasets will be deleted 24 to 48 hours after being created.

LOADING SOURCE CODE

Based on the source code migration parameters established in the property systems centralization project, a utility to transfer source code between databases has been written. While in Natural in the database to which you wish to transfer source code:

- 8. Invoke program **CNMIGRAT**. Depressing PF1 will take you out at any point in the process.
- 9. On the subsequent menu, place any non-blank character next to the LOAD path you wish the source code to follow. Make only one selection.
- 10. On the next menu enter the name of the dataset created in the UNLOAD process.
- 11. After confirming that you wish the migration to continue, a batch job will be submitted, whose name is your user-id, prefixed with the letter 'P'.
- 12. Shortly, you will receive notification (with the job name and number) from the system that the job is complete. MAKE CERTAIN TO CHECK THE JOB in the output queue, to insure it ran successfully and copied the objects you wanted copied.

- 13. Log into the library to which you loaded the source code:
 - i. Issue the CATALL command and catalog the entire library, OR
 - ii. Issue the CATALL command and catalog a group of objects related by a common naming prefix, OR
 - iii. Catalog individual objects using the following command format: CATALL object-name,,ALL

NOTE:

The dataset name carries some useful information. A sample follows:

AGCAMX.MS.DVL.TO.TST.SMITHXX.D051103.T150748

AGCAMX -always contains this high-level qualifier

MS -Center code abbreviation

DVL -the sending environment

TO -literal

TST -the receiving environment

SMITHXX -your user-id

D051103 -the dataset creation date
T150748 -the dataset creation time

These (temporary) datasets will be deleted 24 to 48 hours after being created.

APPENDIX E -- SUPERNATURAL CODE MIGRATION

Introduction

The SESAAS DBA has created tools to migrate Center-unique SuperNatural code between the different databases for the NASA Centralized Property Systems.

Purpose

This Appendix will provide instructions on the steps used to migrate Center-unique Super Natural code between the Development, Test, and Production libraries for the NASA Centralized Property Systems using the product, Add Super Natural.

Scope

This Appendix applies to all Center-unique Super Natural code that needs to be migrated to the Development, Test, and Production libraries for the NASA Centralized Property Systems.

Instructions

Instructions for Migrating Center Unique SuperNatural code to Development, Test, and Production Environments:

- Identify Supernatural users and the Supernatural Transactions required for the Property applications. Categorize those into CRITICAL and Non-CRITICAL. Delete any unnecessary transactions prior to the unloading of the Supernatural code, user and file profiles.
- Identify JCL Members that are currently used for Batch Processing and JCL used by Online Processing. Identify any Supernatural Batch JCL found under the SNAT Administration Special Services that will be required. Note this JCL will need to be unloaded using the normal NATURAL UNLOAD utility. Once loaded to the CAM environment(s), it will have to be customized for that new environment.
- List Users and notate those requiring **Entire Connection** for processing.
- List all FILE NAMES currently referenced by Transactions identified to be migrated.
- Identify Account Codes to be utilized in the JOBs to be run.
- Printer definitions and locations will need to be provided for transactions utilizing a printer.

Center				

Name:								
	SNAT							
	Batch	Supernatural					Entire	
	JCL	Transaction	Critical/		Primary File	Batch/	Connection	Load to:
Userid	Name	Name	Non-critical	Purpose	Used in TXN	Online	Required	NAPROD/ NACOMN/ Both

- Purge current files of any **OBSOLETE** Transactions and Users.
- Provided below is sample **UNLOAD JCL** that can be used by the Center's DBA who will be responsible for **UNLOADING** its Supernatural data including TRANSACTION S, USER and FILE Profile Data. This is sample JCL only. The Center DBA may already have JCL in place for this function. In either case the DBA will need to provide the dataset name(s) that the Supernatural data has been unloaded to. Once created, the SESAAS/NACC will load the data to the appropriate LAPR. The dataset created by the UNLOAD JCL will follow a naming convention such that the high-level qualifier is consistent with:

ARMOV for ARC
DFMOV for DFRC
LEMOV for GRC
GSMOV for GSFC
J5MOV for JSC
KSMOV for KSC
LAMOV for LARC
MSMOV for MSFC
SSMOV for SSC

UNLOAD JCL

Supernatural Unload

```
//* UNLOAD OBJECTS FROM SUPERNATURAL.
//*
//* OBJECTS: U - USER PROFILE DATA
                                      (SEE SUPERNATURAL ADMIN
       F - FILE PROFILE DATA
                                MANUAL)
//*
      H - HELP TEXTS
//*
      T - TEXT CONSTANTS
//*
      D - DELETE DATA
//*
       S - TRANSACTION SPECIFICATION
//*
       * - ALL DATA
//*
//* WHEN SPECIFYING OBJECT TO BE UNLOADED, YOU MUST HAVE
CORRECT
//* LIBRARY AND TRANSACTION PREFIXES. (DEFAULTS ARE Y AND I
RESP.)
//*
//* YOU WILL NEED TO REMOVE THE STARTUP TRANSACTION 'MENU' FOR
SYSSN
//* AND ALLOW THE COMMAND LINE TO MAKE THIS JCL WORK.
//*
//NATB0614 EXEC PGM=NATBATCH,REGION=0M,
// PARM=('IM=D,ID=",",MADIO=0,MAXCL=0,MT=0,AUTO=OFF,',
// 'PS=0,DBID=XXX,SYS=BAT')
//STEPLIB DD DSN=SYS2A.DB000.NAT.LOAD.BATCH,DISP=SHR
     DD DSN=SYS2A.ADABAS.LOAD,DISP=SHR
//SYSOUT DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//CMPRINT DD SYSOUT=*
//DDPRINT DD DUMMY
```

```
//SORTMSG DD DUMMY
//CMWKF04 DD DSN=NATURAL.SNUNLOAD.DB099.JAN0802,
//
       DCB=(RECFM=VB,LRECL=4624,BLKSIZE=4628),UNIT=SYSD
//
       DISP=(NEW,CATLG,DELETE),SPACE=(TRK,(3,2),RLSE)
//*
//* THIS JOB WILL RUN WITH OR WITHOUT NATURAL SECURITY INSTALLE
//*
//DDCARD DD *
ADARUN MODE=MULTI, DATABASE=???, DEVICE=3390, SVC=245, PLOGRQ=NO
//CMSYNIN DD *
SYSSN, USERID, PASSWORD
SNULD
S,*,,YSJDTA00
FIN
//
```

The commands within the SNULD utility vary in functionality. Further instructions can be found in the Supernatural Utility manual. Below are some sample commands and the function they perform. Since some of these commands perform a specific function and may not give the results intended, the output of the Unload job needs to be checked very closely.

Unload SNAT transactions for a particular user:

SNULD

S,*,,YSJDTA00

(YSJDTA00 is the user - in our case all users have a default prefix of Y, each center needs to verify the prefix used at their site)

Unload User Profile(s)

U,* (Unloads all User Profiles)

U,SJDTA00 (Unloads user Profile for specific user - Note no prefix)

Unload File Profile(s)

F,* (Unload all file profiles)

F, filename (Unloads file profile for particular file)

Unload Everything (Unloads User and file profiles but DOES not unload Transactions)

SNULD

*

Finally,

Note that these commands can be combined in one job stream. So you can:

Unloads User Profile and all SNAT TXNs for SJDTA00

SNULD

U,SJDTA00

S,*,,YSJDTA00

Unload all User Profiles and files & unload all SNAT TXNS (this job may run a while and is not recommended unless you have cleaned up all the TXNS of all users or have a limited number of SNAT users)

SNULD

*

S,*,,*

APPENDIX F -- POINTS OF CONTACT

Table F-1 contains the Points-of-Contact for the NASA Centralized Property Systems Support Teams located at Marshall Space Flight Center (MSFC).

Group	Name	Phone	Fax	Email Address	Comments
NACC	Help Desk	256-544-6673	-	-	-
Agency	Wofford, Marisa	256-544-7482	256-544-5842	marisa.s.wofford@nasa.gov	AD33
Agency	Zurkin, Nikita	256-544-6326	256-544-6570	nikita.zurkin@nasa.gov	AD40 / Program Functional Manager
SESAAS	Graham, Billy	256-544-5516	256-544-1836	Billy.graham@msfc.nasa.gov	Group Manager - Property
NEMS & NPDMS	Cantrell, Neal	256-544-8394	256-544-1836	neal.cantrell@msfc.nasa.gov	Lead
NSMS	Neely, Scott	256-544-1049	256-544-1836	scott.neely@msfc.nasa.gov	Lead
NOSC	Styles-Oscarson, Charmaine	256-544-8503	256-544-1836	charmaine.styles- oscarson@msfc.nasa.gov	Lead
SESAAS	Bishop, Rick	256-544-5352	256-544-2659	richard.a.bishop@msfc.nasa.gov	DBA Support
NACC	John Thornberry	256-544-6563	256-544-5512	john.thornberry@msfc.nasa.gov	DBA Support
NACC	Sanders, Ron	256-544-7367	256-544-5512	ron.sanders@msfc.nasa.gov	NACC Support

Table F-1 – NASA Property Systems Centralization Support Team

Table F-2 contains the primary Center Points-of-Contact for the NASA Centralized Property Systems.

Center	Name	Phone	Fax	Email Address	Role/System
ARC	Kelly James	650-604-5140	650-604-7739	Kelly.J.James@nasa.gov	Center POC/All Systems
	Carl Lawson	650 604-6876		clawson@mail.arc.nasa.gov	Technical/NEMS&NPDMS, and NSMS&NOSC
	Harsha Vaishnav	650 604-5580		hvaishnav@mail.arc.nasa.gov	Technical/NEMS&NPDMS, and NSMS&NOSC
	Renato Sumalpong	650-604-3805	650-604-1796	Renato.R.Sumalpong@nasa.gov	Center POC/All Systems
DFRC	Jean Manning	661-276-2590	661-276-2010	Jean.Manning@dfrc.nasa.gov	Center POC/All Systems
	Linda Kotora	256 544-0944		linda.kotora@msfc.nasa.gov	Technical/NEMS&NPDMS, and NSMS&NOSC
	Kim Rogers	256 544-5309		kim.rogers@msfc.nasa.gov	Technical/NEMS&NPDMS, and NSMS&NOSC
GRC	Linda Norberg	216-433-3027	216-433-5807	linda.a.norberg@grc.nasa.gov	Center POC/All Systems
	Mark Roberts	216 433-8170	216 433-3859	mark.d.roberts@grc.nasa.gov	Technical/NEMS&NSMS, and NOSC
	Bill Lappin	216 977-1461	216 977-1303	william.r.lappin@grc.nasa.gov	Technical/NPDMS&NSMS, and NOSC
	Michael Csuti	216-433-8129	216-433-8000	Michael.S.Csuti@grc.nasa.gov	Technical/NSMS&NOSC
GSFC	Linda Wallace	301-286-3244	301-286-1644	linda.t.wallace.1@gsfc.nasa.gov	Center POC/All Systems
	Jerry Khatcheressian	301 286-0476		jkhatche@pop200.gsfc.nasa.gov	Technical/NEMS
	Debbi Harper	301 286-0484		Deborah.B.Harper.1@gsfc.nasa.gov	Technical/NPDMS
	Connie Higgs			connie.S.Higgs@nasa.gov	
JSC	Vincent Johnson	281-483-6519	281-244-5123	vincent.1.johnson1@jsc.nasa.gov	Center POC/All Systems
	Bert Hurst	281 336-3405		bhurst@saicmail.jsc.nasa.gov	Technical/NEMS&NPDMS, and NSMS&NOSC
	Darryl Smith	281 336-3420		dsmith1@saicmail.jsc.nasa.gov	Technical/NEMS&NPDMS, and NSMS&NOSC
	Janice Mars			jmars@saicmail.jsc.nasa.gov	Technical/NEMS&NPDMS

Center	Name	Phone	Fax	Email Address	Role/System
	Jeff Hickman	281 336-3812		jhickman@saicmail.jsc.nasa.gov	Technical/NSMS & NOSC
				Johnny.j.bernal@wstf.nasa.gov	Technical/NEMS&NPDMS
KSC	Ron Allen	321-867-7325	321-867-4290	ronald.allen-1@pp.ksc.nasa.gov	Center POC/All Systems
	Ron Allen	321 867-7325	321 867-4290	Ronald.Allen-1@pp.ksc.nasa.gov	Technical/NEMS&NPDMS
	Albert Owens			albert.owens@jbosc.ksc.nasa.gov	Technical/NEMS&NPDMS
LaRC	Theresa Elliott	757-864-3570	757-864-8803	theresa.f.elliott@nasa.gov	Center POC/All Systems
	Jeanette George	757 864-3258	757 864-8342	jeanette.w.george@nasa.gov	Technical POC/All Systems
MSFC	Nikita Zurkin	256-544-6326	256-544-6570	nikita.zurkin@nasa.gov	Center POC/All Systems
	Debi Nelson	256 544-5264	256 544 3698	debi.nelson@msfc.nasa.gov	Technical/NEMS&NSMS, and NOSC
	Winnie Jobes	256 544-4863	256 544 6570.	winnie.jobes@msfc.nasa.gov	Technical/NPDM&NSMS, and NOSC
SSC	Donna Lossett	228-688-2628	228-688-7288	Donna.Lossett@ssc.nasa.gov	Center POC/All Systems
	Randy Taylor	228 688-1202		Randy.Taylor@ssc.nasa.gov	Technical/NEMS&NPDMS, and NSMS&NOSC
				SDCOPS@ssc.nasa.gov	

Table F-2 –**Center Points-of-Contact for NASA Property Systems**

APPENDIX G -- VIRTUAL TAPES

INTRODUCTION

The NACC has determined a problem with the use of physical tapes when they are not needed for delivery outside of the NASA Centralized Property System. The physical tape requires operator intervention to load and unload the tape. When this does not occur within a specific period of time, the job will abend. A workaround to this is to use virtual tapes.

PURPOSE

The purpose of this Appendix is to establish the method for creating virtual tapes and the associated Generation Data Group (GDG).

SCOPE

This Appendix will describe the use of virtual tapes with GDG in Center-specific JCL on the NACOMN and NAPROD LPARS.

Virtual Tapes

When creating a backup of a file or application, a virtual tape should be used instead of a reel tape. When a virtual tape is used the problems of operator intervention are eliminated. The virtual tape is also more efficient. The physical tape should be primarily used for shipment of data to another site. The following instructions are provided to assist Centers in creating a virtual tape with a Generation Data Group (GDG).

The following is an example of a virtual tape with the unit set to 'STK'. The DSN uses the DSNNAME with a (+1) to create a new generation.

```
//DDSAVE1 DD DSN=DSNNAME(+1),
// DISP=(NEW,CATLG),UNIT=STK
```

GDG Creation

To create a GDG, the following JCL can be used. It is run independently of the Property job and is only run once to create the GDG. The limit is dependent on how many versions will be needed backed up. If you want one for each month then the limit will be 12. The limit should be at least two. The dashes that appear on each line following the DEFINE are important. By using NOEMPTY, when the group has reached its max of generations the oldest generation will be removed from the group. The SCRATCH clause will scratch the data set when it is removed from the group.

```
//* CREATE GDG BASE WITH LIMIT OF 10
//CRTBASE EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=A
//SYSIN DD *
DEFINE -
GENERATIONDATAGROUP(NAME(DSNNAME) -
NOEMPTY -
SCRATCH -
LIMIT(10))
/*
```

GDG Access

To access a generation of the GDG, handle it as though it were a physical tape. The following JCL will create a dataset that can be read. The number after the DSNAME represents the generation desired. 0 is the current generation, 1 is the previous generation, on up to the max generation. The space for the new generation needs to be able to handle the full size of the dataset.

```
//DELETE EXEC PGM=IEFBR14

//SYSPRINT DD SYSOUT=*

//AF1 DD DSN=NEW.DSNAME,

// DISP=(MOD, DELETE), UNIT=SYSDA

//*

//TAPEREAD EXEC PGM=IEBGENER

//SYSPRINT DD SYSOUT=*

//SYSIN DD DUMMY

//SYSUT1 DD DSN=DSNAME(0),

// DISP=(SHR)

//SYSUT2 DD DSN=NEW.DSNAME,

// DISP=(,CATLG,CATLG),UNIT=SYSDA,SPACE=(CYL,(10,5),RLSE)

//*
```

GDG Deletion

To delete a generation of the GDG, you can use IDCAMS as in the following example. The generation will be the GDG name with a generation appended to the end such as .G0086V00. The dashes are a part of the step.

```
//* DELETE CURRENT VERSION OF DATA SET
//DELCURR EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
DELETE -
    DSNNAME.G0086V00
/*
```

To delete the GDG base you use a similar step to the previous step, which is shown in the following example. The dashes are a part of the step.

```
//* DELETE GDG BASE
//DELBASE EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
DELETE -
DSNNAME -
PURGE
```

APPENDIX H – SPECIFIC DATA BACKUPS AND RESTORES

Introduction

Operational data backups are created by NACC according to an approved approach in order to meet specific NACC data requirements. These backups may be used to restore Centralized Property Systems (also referred to as "CAM") data should the need arise.

Purpose

This Appendix provides an overview of NACC's data backup and data restore approaches, along with guidelines for Centers to follow when creating their own Centerspecific backups.

Scope

This Appendix covers the NACC ADABAS backups, NACC disaster/recovery backups, and Center-created backups and data restores.

Backups and Restores

NACC ADABAS Backups

Daily and weekly full ADABAS backups are taken of each of the centralized property systems databases. All the backups use a GDG type format, with a limit on the number of versions that are kept. When that number is reached, the oldest backup is then rolled out, replaced with the newest one and the oldest is marked for deletion. The daily backups are kept for 6 days, at which time the oldest is rolled off the list and marked for deletion. The weekly backups are run on either Friday night or Saturday morning, depending upon the scheduler, and are kept for 6 weeks. Again, like the dailies, at the end of the 6th week, the oldest backup is rolled off the list, marked for deletion and replaced with the most current. The daily backup is not run when the weekly backup is run. A given ADABAS database can be recovered only to one of those points. Using TSO ISPF option 3.4 and SDSF the Center DBAs with special approved access 1 can view the number of backups and the dates created to determine the available recovery dates.

To find the backups in ISPF:

- Use the XXCAM.DBAAS.DBNNN.DAILY or WEEKLY as the data set name
- Replace the XX with the HLQ for your center and the NNN with the appropriate data base number
- The @LE command can then be used to determine the creation date.

To find the actual data base backup jobs that were run:

• Set the SDSF job prefix to SHBKXNNN, replacing X with either D or W and replacing the NNN with the data base number.

¹ Note that due to security limitations, not all users will be able to view these jobs.

NACC Disaster/Recovery Backups

In addition, there are daily and weekly Disaster Recovery backups made of the NAPROD LPAR. This includes not only the ADABAS file components but all other DASD files on that LPAR. The daily backups are kept for one week, using the same type of GDG rules as above. The weekly backups are kept for 4 weeks. This means that a user can request the recovery of both an ADABAS database and all associated sequential data sets for a given day within only the same week. After that week, the recovery goes to a weekly level, meaning the data can only be recovered at four points within the past 4 weeks based on whatever day the weekly backup was done. To do either the weekly or a daily recover, the user must have specific information: the names of all the DASD files that need to be recovered; databases to be recovered; and an understanding of the impact on shared databases. This process should only be considered for serious problems and requires considerable time and coordination. Due to the integrated nature of this environment, it is not possible to issue a "recover all" of the data files on this environment without concurrence from all the centers. A recovery can be done of all XXCAM data sets for a given center (XX would be replaced by the center code).

Center Created Backups and Data Restores

Centers may create Center-owned backups for any of the Center's CAM files located on their Center's CAM databases. (Production, Test, Development). These backups are created, named and retained, as the Centers deem necessary.

Centers can also restore data files in their CAM databases, as they deem necessary. Release file changes are applied initially by SESAAS at the time releases are installed. The Center is responsible for reapplying file changes if a data restore is performed using a backup from a previous release.

SESAAS is responsible for restoring data for the shared CAM files that reside on the shared CAM database (NEMS-TABLE, NEMS-TRANSFER, ND-TABLE and ND-ERROR). Any restore for these files will have to be coordinated with all Centers.

It is also possible to restore data from a tape backup created on one LPAR into a database residing on another LPAR (i.e. a NAPROD Production ADASAV backup into a NACOMN Development database) The following ADASAV syntax is necessary to properly reference a tape backup across LPARs:

```
//DDREST1 DD DSN=xxCAM.DBAAS.DBnnn.DAILY.GnnnnV00,
// DISP=(OLD,KEEP,KEEP),
// UNIT=STK,EXPDT=98000,
// VOL=SER=(??????,?????)
```

Use the full DSN of the tape, including the GDG GnnnnV00 qualifier, plus the full list of tape VOL SERs used.

Operational Support Hand Book

APPENDIX I – CM OF MODULES THAT UPDATE NON-PARTITIONED FILES

Introduction

Center Technical Support Personnel (CTSP) are responsible for creation and modification of Center-unique software modules. The CTSP must notify the NEMS/NPDMS Technical Lead (TL) whenever a Center-unique module that modifies a Non-Partitioned File has been created or modified. The Non-Partitioned Files are the NEMS NEMS-TABLE and NEMS-TRANSFER and the NPDMS ND-TABLE and ND-ERROR.

Purpose

This Appendix provides the steps necessary for the Configuration Management of Center-unique modules that modify Non-Partitioned Files.

Scope

All Center-unique modules that modify the 4 Non-Partitioned Files identified above must be identified and approved by SESAAS prior to being cataloged in the production environment.

Migration and Approval Steps

The following steps must be executed for a Center to place one of these type modules into production.

- 1. Center identifies module to Technical Lead via e-mail (with module name and location)
- 2. Technical Lead reviews module
- 3. Technical Lead approves or disapproves module
- 4. Technical Lead informs CTSP of the reason why a module is disapproved. The CTSP may fix and resubmit the module starting at step 1
- 5. Technical Lead informs the SESAAS DBA of modules approved
- 6. SESAAS DBA catalogs approved modules
- 7. The SESAAS DBA notifies Center Technical Support that approved modules have been cataloged
- 8. Center Technical Support execute module(s) in Test Library
- 9. Center Technical Support moves successfully tested module(s) to Production

APPENDIX J – RELEASE INSTALLATION PROCEDURES

1.0 CAM Release installation Steps

- 1.1 Coordination between the Centers and SESAAS support has taken place to schedule the CAM release installation. The SESAAS DBA has made available Mailbox information windows in Natural Security (figure J1 below), notifying CAM personnel of the pending release installation.
- 1.2 The day of the release installation, the SESAAS DBA will set the NASA CAM indicator to "N" just before the start the nightly NACC backups. This will ensure that online CAM is down when the nightly backups are complete and prevent early-bird online CAM users from interfering with the CAM release installation. The NASA CAM setting "N" indicates that CAM is unavailable for all online Center CAM users (figure J2). All Center CAM indicators are also set to "N" at this time. Center personnel attempting to use online CAM will receive a screen stating "CAM is temporarily inactive for your Center" (figure J3 below).
- 1.3 Immediately following 1.2, the SESAAS DBA will email the NASA CAM Technical Points-of-Contact (Table J1 below) stating that the CAM release installation has begun. This email will be sent as soon as the NASA CAM indicator is set to "N". Should the NACC backups run long (past 5:00am), the SESAAS DBA will email the NASA CAM Technical Points-of-Contact (Table J1 below) stating that the start of the CAM release installation has been delayed.
- 1.4 As soon as the NACC backups are complete, the CAM release installation will begin in earnest.
- 1.5 After completion, the SESAAS DBA will set the NASA CAM indicator to "Y" (figure J4 below) indicating that CAM is available for all Center technical personnel to complete Center level release installation activities. This time can be used to verify the CAM release installation, limited testing, Center unique library CATALLs, etc... (Center end-users will still be locked out of CAM at this time and still see the map in Figure J2 below).
- 1.6 Immediately following 1.5, the SESAAS DBA will email the NASA CAM Technical Points-of-Contact (Table J1 below) stating that the CAM release installation is complete and ready for the Center Technical personnel to perform Center level release installation activities.
- 1.7 After completing Center level release installation activities, Center Technical personnel can set their Center's CAM indicator to "Y" (figure J5 below) indicating that online CAM is available at their Center (remember to press PF5, to apply update, and receive update confirmation message, figure J6 below).
- 1.8 Technical personnel at the Center should then execute the Center process notifying Center end-users that online CAM is available at the Center.

2.0 NASA/Center CAM Indicator Settings

- 2.1 CAM indicator = "N" and Center indicator = "N" SESAAS DBA/technicals can enter CAM. Center technicals/end-users will see figure J3.
- 2.2 CAM indicator = "Y" and Center indicator = "N" SESAAS DBA/technicals, Center technicals can enter CAM. Center end-users will see figure J3.
- 2.3 CAM indicator = "Y" and Center indicator = "Y" All can enter CAM.

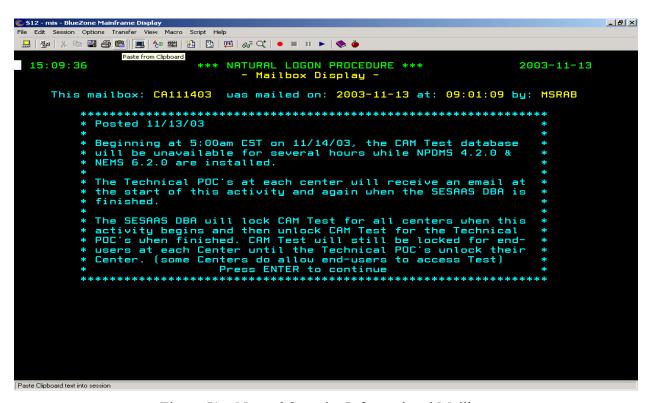


Figure J1 – Natural Security Informational Mailbox

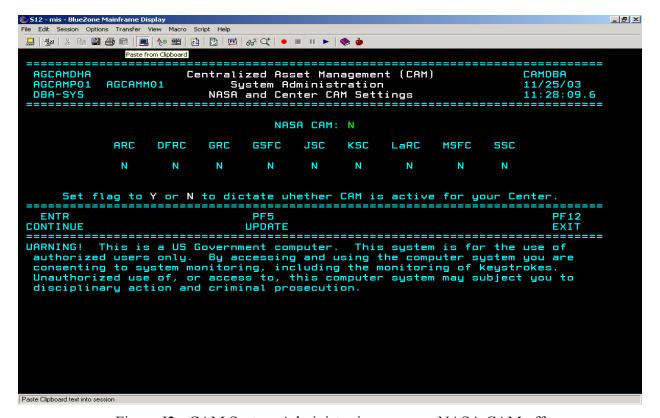


Figure J2 - CAM System Administration screen – NASA CAM off

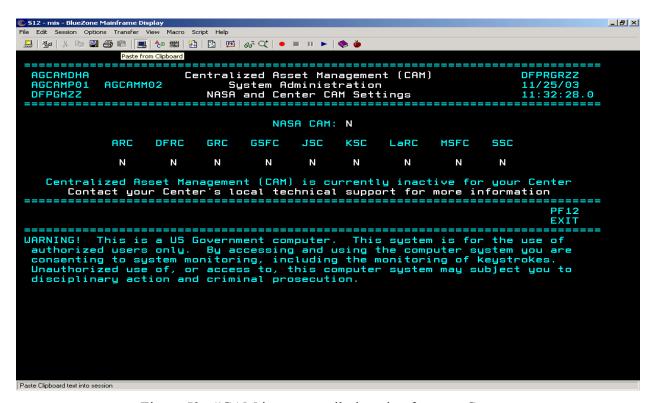


Figure J3 - "CAM is temporarily inactive for your Center"

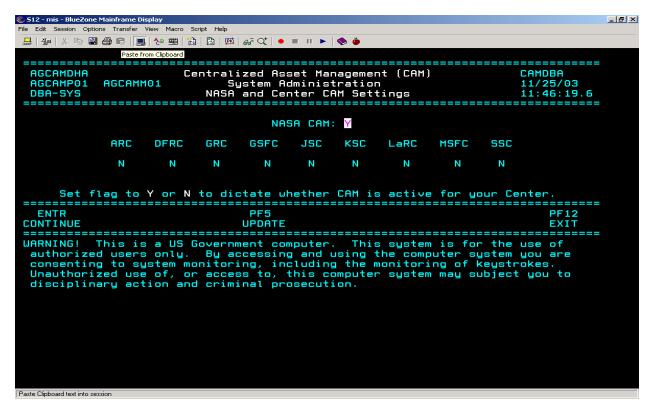


Figure J4 - CAM System Administration screen – NASA CAM on

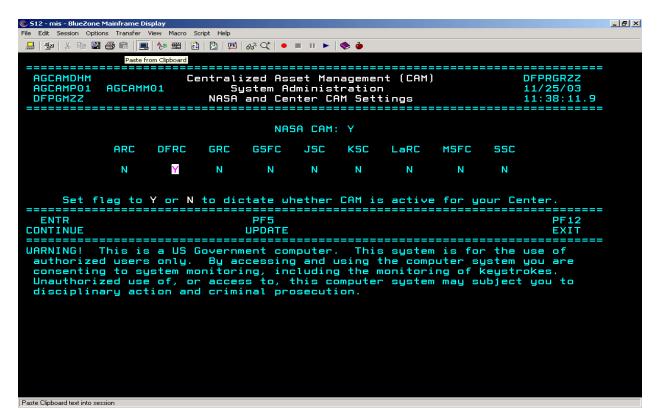


Figure J5 - CAM System Administration screen – Center CAM on

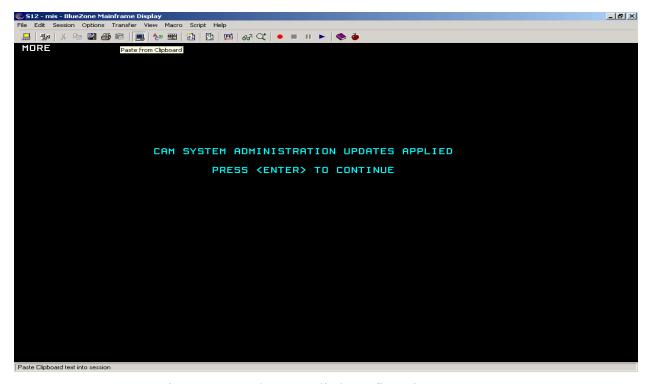


Figure J6 – Updates Applied Confirmation Message

Table J1 contains the primary Technical Points-of-Contact for the CAM Systems or NASA Centralized Property Systems.

Center	Name	Phone	Fax	Email Address	Role/System
ARC	Eileen Soeder	650 604-6878		esoeder@mail.arc.nasa.gov	DBA/All CAM
	Carl Lawson	650 604-6876		clawson@mail.arc.nasa.gov	Technical/ All CAM
	Harsha Vaishnav	650 604-5580		hvaishnav@mail.arc.nasa.gov	Technical/ All CAM
DFRC	Garrett Boersma	256 544-5352	256 544-1487	garrett.boersma@msfc.nasa.gov	DBA/ All CAM
	Richard Bishop	256 544-5352	256 544-1487	richard.bishop@msfc.nasa.gov	DBA/ All CAM
	Linda Kotora	256 544-0944	256 544-1487	linda.kotora@msfc.nasa.gov	Technical/All CAM
	Kim Rogers	256 544-5309	256 544-1487	kim.rogers@msfc.nasa.gov	Technical/All CAM
GRC	Craig Sanders	216 433-2434	216 433-8000	Craig.C.Sanders@grc.nasa.gov	DBA/All CAM
	Mark Roberts	216 433-8170	216 433-3859	mark.d.roberts@grc.nasa.gov	Technical/NEMS&NSMS, and NOSC
	Bill Lappin	216 977-1461	216 977-1303	william.r.lappin@grc.nasa.gov	Technical/NPDMS&NSMS, and NOSC
	Michael Csuti	216 433-8129	216 433-8000	Michael.S.Csuti@grc.nasa.gov	Technical/NSMS&NOSC
GSFC	Don Oliver	301 286-0049	301 286-1644	donald.p.oliver.1@gsfc.nasa.gov	DBA/All CAM
	Jerry Khatcheressian	301 286-0476	301 286-0260	jkhatche@pop200.gsfc.nasa.gov	Technical/NEMS
	Debbi Harper	301 286-0484	301 286-0260	Deborah.B.Harper.1@gsfc.nasa.gov	Technical/NPDMS
10.0		201 204 2405			
JSC	Bert Hurst	281 336-3405		bhurst@saicmail.jsc.nasa.gov	Technical/All CAM
	Darryl Smith	281 336-3420		dsmith1@saicmail.jsc.nasa.gov	Technical/All CAM
	Janice Mars	281 336-3822		jmars@saicmail.jsc.nasa.gov	Technical/NEMS&NPDMS
	Jeff Hickman	281 336-3812		jhickman@saicmail.jsc.nasa.gov	Technical/NSMS & NOSC
KSC	Ron Allen	321 867-7325	321 867-4290	ronald.allen-1@pp.ksc.nasa.gov	DBA/All CAM
	Roger MacMichael	321 867-2831	321 867-9248	Roger.MacMichael-1@ksc.nasa.gov	DBA/All CAM
	Ron Allen	321 867-7325	321 867-4290	Ronald.Allen-1@pp.ksc.nasa.gov	Technical/All CAM

Center	Name	Phone	Fax	Email Address	Role/System
	Albert Owens			albert.owens@jbosc.ksc.nasa.gov	Technical/All CAM
LaRC	Paul Sowash	757 224-4073	757 864-8838	P.A.Sowash@larc.nasa.gov	DBA/AII CAM
	Susan Thornton	757 224-4074	757 865-8562	s.m.thornton@larc.nasa.gov	DBA/All CAM
	Jeanette George	757 864-3258	757 864-8342	jeanette.w.george@nasa.gov	Technical/All CAM
MSFC	Garrett Boersma	256 544-5352	256 544-1487	garrett.boersma@msfc.nasa.gov	DBA/All CAM
	Richard Bishop	256 544-5352	256 544-1487	richard.bishop@msfc.nasa.gov	DBA/All CAM
	Debi Nelson	256 544-5264	256 544 3698	debi.nelson@msfc.nasa.gov	Technical/NEMS&NSMS, and NOSC
	Winnie Jobes	256 544-4863	256 544 6570.	winnie.jobes@msfc.nasa.gov	Technical/NPDM&NSMS, and NOSC
SSC	Ralph Fredrick	228 688-2040	228 688-1070	Ralph.Frederick@ssc.nasa.gov	DBA/All CAM
	Randy Taylor	228 688-1202	228 688-1070	Randy.Taylor@ssc.nasa.gov	Technical/All CAM
	Dianne Fulton	228 688-3717	228 688-1770	Diane.Fulton@ssc.nasa.gov	Technical/All CAM
	Donna Lossett	228 688-2628	228 688-7288	Donna.Lossett@ssc.nasa.gov	Functional/All CAM
NACC	Ron Sanders	256 544-7367	256 544-5512	ron.l.sanders@msfc.nasa.gov	DBA
	John Thornberry	256 544-6563	256 544-5512	john.thornberry@msfc.nasa.gov	DBA
SESAAS /CAM	Nikita Zurkin	256 544-6326	256 544-6570	nikita.zurkin@nasa.gov	POC/CAM
	Richard Bishop	256 544-5352	256 544-1487	richard.bishop@msfc.nasa.gov	DBA/CAM
	Garrett Boersma	256 544-5352	256 544-1487	garrett.boersma@msfc.nasa.gov	DBA/CAM
	Neal Cantrell	256 544-8394	256 544-5416	Neal.Cantrell@msfc.nasa.gov	Lead/NEMS&NPDMS
	Scott Neely	256 544-1049	256 544-5416	Scott.Neely@msfc.nasa.gov	Lead/NSMS
	Charmaine Styles- Oscarson	256 544-8503	256 544- 5416	Charmaine.Styles-Oscarson@msfc.nasa.gov	Lead/NOSC

Table J1 – NASA Centralized Asset Management (CAM) Technical Points-of-Contact